



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,236	07/17/2006	Xavier Prignon	505621	1824
53609 7590 11/18/2009 REINHART BOERNER VAN DEUREN P.C. 2215 PERRYGREEN WAY ROCKFORD, IL 61107				
EXAMINER				
MATTHEWS, TERRELL HOWARD				
ART UNIT		PAPER NUMBER		
3653				
NOTIFICATION DATE		DELIVERY MODE		
11/18/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

RockMail@reinhartlaw.com

### Office Action Summary

**Application No.**

10/586,236

**Applicant(s)**

PRIGNON, XAVIER

**Examiner**

TERRELL H. MATTHEWS

**Art Unit**

3653

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's arguments, see pg. 6-10, filed 8/13/2009, with respect to the rejection(s) of claim(s) 1-14, 16-22 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view Weit (US-5232096) in view of Hanke (US-4869786).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weit (US-5232096) in view of Hanke (US-4869786).

Referring to claims 1-14, 16-22. Weit discloses a "Material Dispersion Apparatus". See Figs. 1-4 and respective portions of the specification. Weit further discloses an air classifier for separation of materials into fractions of different grain sizes comprising: a rotary cage (4) adapted to create a vortex when subjected to air flow, the rotary cage classifying the materials into fine particles and coarse particles; a recovery chamber, cylindrical in shape, open to the rotary cage, and having an outlet bottom (27), said recovery chamber being defined by casing (2), wherein the recovery chamber receives the fine particles mixed with air from the rotary cage (See at least Fig. 1); said

recovery chamber coaxially arranged in a protrusion of the rotary cage, the recovery chamber adapted to use the vortex created by the rotary cage for cycloning the fine particles mixed with air and separating the fine particles; and said recovery chamber including a fine particles outlet, wherein the fine particles exit through the fine particles outlet (26). Additionally, Weit discloses wherein the recovery chamber and rotary cage share the same vertical axis (See at least Fig. 1) and deflectors (22) positioned in the outlet part of the rotary cage are attached to the cage itself (See at least Col. 3 l. 33-35 & at least Fig. 1). Weit does not disclose separating fine particles from air or disclose wherein the recovery chamber comprises a fine particles outlet and an air outlet and wherein dedusted air exits through the air outlet. Hanke discloses an "Air classifier process and air classifier". See Figs. 1-3 and respective portions of the specification. Hanke further discloses an apparatus comprising a material inlet (25) rotary cage (9) and a recovery chamber (2) with an outlet bottom (near duct 20), said chamber being defined by a casing (outer shell), mobile deflectors (35) and wherein the recovery chamber comprises openings in the casing allowing the passage of the centrifuged material towards ducts for collecting material. Moreover, Hanke discloses the classifier comprising at least two separate openings on the outlet bottom, a particles outlet (20) and an air outlet (23), wherein the particles separated from air exit through the particles outlet and dedusted air exits through the air outlet (23). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the apparatus of Weit to include the teachings of Hanke wherein an air outlet was included so that fine particles and air exited through separate outlet, so that dedusted air could be sent back

to the air intake as a way of reusing the air to further separate additional particles, making the apparatus more efficient and effective for separation of particles. Moreover, these variations are predictable to one of ordinary skill in the art. See MPEP 2143. Further, the prior art discussed and cited demonstrates the level of sophistication of one with ordinary skill in the art and that these modifications would be well within this skill level. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Weit as is well known in the art. Likewise, the applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being use, as claimed. See MPEP 2112.02, 2214. With respect to claims 14, 16-22, the method described in these claims would inherently result from the use of Weit's "Material Dispersion Apparatus" in view of Hank's "Air Classifying Process and Air Classifier" as advanced above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERRELL H. MATTHEWS whose telephone number is (571)272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick H. Mackey/  
Supervisory Patent Examiner, Art  
Unit 3653

THM